

CLAIM AMENDMENTS

1. (Previously presented) Method for producing a strip the width of which is defined by the two longitudinal edges thereof, which is made of at least one first metallic or predominantly metallic material, and in which the region, across which the first material extends, is provided with a boundary area that extends in staggered manner between the two longitudinal edges over the cross-section of the strip, comprising the steps of

(a) combining strips of different widths, which contain the first material and which as such do not comprise a staggered boundary area between their two longitudinal edges, only in a roll nip or before a roll nip to form a first arrangement of strips having a staggered boundary area;

(b) complementing the first arrangement of strips by one or more additional strips only in a roll nip or before a roll nip to form a second arrangement of strips having a rectangular cross-section; and

(c) bonding at least the strips of the first arrangement of strips to each other by rolling.

2. (Previously presented) The method as defined in claim 1, wherein the steps (a) and (b) are carried out simultaneously.

3. (Previously presented) The method as defined in claim 1, wherein two cylindrical working rolls are used for rolling, which define between them ~~a~~ the roll nip, and that the different strips from which the second arrangement of strips is formed are united only in or shortly before the nip.

4. (Previously presented) The method as defined in claim 1, wherein rolling is carried out as a cold-roll plating operation.

5. (Previously presented) The method as defined in claim 1, wherein rolling is carried out as a hot-roll plating operation.

6. (Previously presented) The method as defined in claim 4, wherein the strip is equalized by an additional rolling operation after the roll-plating process.

7. (Previously presented) The method as defined in claim 6, wherein the strip is wound up only after the equalization process.

8. (Previously presented) The method as defined in claim 6, wherein the strip is equalized between two equalizing rolls arranged downstream of the working rolls.
9. (Previously presented) The method as defined in claim 1, wherein an intermediate layer, acting as intermediary in the bonding process, is arranged between the strips of the first arrangement of strips if and to the extent these cannot be bonded immediately by rolling.
10. (Previously presented) The method as defined in claim 9, wherein a separate strip is introduced into the first arrangement of strips for forming the intermediate layer.
11. (Previously presented) The method as defined in claim 9, wherein the intermediate layer is bonded onto one or more of the strips that form the first arrangement of strips, before they are united to form the first arrangement of strips.
12. (Previously presented) The method as defined in claim 11, wherein the intermediate layer is galvanically separated onto one or more of the strips that form the first arrangement of strips.
13. (Previously presented) The method as defined in claim 9, wherein the intermediate layer is selected to be thinner than the strips that are to be connected by it.
14. (Previously presented) The method as defined in claim 9, wherein the intermediate layer is selected to be very much thinner than the strips that are to be connected by it.
15. (Previously presented) The method as defined in claim 12, wherein the intermediate layer is applied by separation in a thickness of 10 μm maximally.
16. (Previously presented) The method as defined in claim 12, wherein intermediate layer is applied by separation in a thickness of 5 μm maximally.
17. (Previously presented) The method as defined in claim 1, wherein the material of one, more or all additional strips that complement the first arrangement of strips to form the second arrangement of strips is selected to ensure that it will form no or only a considerably weaker bond with the strips of the first arrangement of strips by the rolling operation than

the strips, and that these additional strips, whose material is selected in the described way, is removed from the second arrangement of strips after the rolling process.

18. (Previously presented) The method as defined in claim 17, wherein following the nip, the additional strips to be removed are pulled in a different direction than the composite strip to be produced, showing the stronger bond and contained the first arrangement of strips, and that the additional strips to be removed are removed in this way from the rolled second arrangement of strips.

19. (Previously presented) The method as defined in claim 18, wherein at the point (A, B) where the additional strips to be removed separate from the composite strip showing the stronger bond, guide surfaces are provided between that composite strip and the one or more strips to be removed, which support the guiding effect that moves the strips in the respective direction of tension.

20. (Previously presented) The method as defined in claim 19, wherein the guiding surfaces form one or more wedges.

21. (Previously presented) The method as defined in claim 6, ~~in conjunction with claim 17,~~ wherein the material of one, more or all additional strips that complement the first arrangement of strips to form the second arrangement of strips is selected to ensure that it will form no or only a considerably weaker bond with the strips of the first arrangement of strips by the rolling operation than the strips, and that these additional strips, whose material is selected in the described way, is removed from the second arrangement of strips after the rolling process, and

wherein the equalizing process is carried out after at least one of the additional strips has been removed from the rolled second arrangement of strips.

22. (Previously presented) The method as defined in claim 6, ~~in conjunction with claim 17,~~ wherein the material of one, more or all additional strips that complement the first arrangement of strips to form the second arrangement of strips is selected to ensure that it will form no or only a considerably weaker bond with the strips of the first arrangement of strips by the rolling operation than the strips, and that these additional strips, whose material is selected in the described way, is removed from the second arrangement of strips after the rolling process, and

wherein the equalizing process is carried out after all additional strips have been removed from the rolled second arrangement of strips.

23. (Previously presented) The method as defined in claim 1, wherein the material of the one or of the additional strips is selected to be different from the first material and that all strips of the second arrangement of strips are bonded together by the rolling process.

24. (Previously presented) The method as defined in claim 1, wherein the strips used are strips which, apart from a plated layer which is thin compared with the thickness of the respective strip and which is to produce the bond during the rolling process, consist of a single material in their entirety.

25. (Previously presented) The method as defined in claim 24, wherein strips consisting of a homogenous material are used.

26. (Previously presented) The method as defined in claims 1, wherein the strip is subjected to a heat-treatment after the rolling operation.

27. (Previously presented) The method as defined in claim 1, wherein the first arrangement of strips comprises at least two strips arranged one beside and in parallel to each other so that their neighboring flanks are in contact with each other, that the material properties of the flanks to be connected are determined in such a way that the contacting flanks can be caused by heating to form a material bond,
and that the at least two strips are heated, at least in the area of their contacting flanks, to a temperature at which those flanks will then immediately form a material bond one with the other.

28. (Previously presented) The method as defined in claim 27, wherein the second arrangement of strips is guided during the rolling operation so that its strips are prevented from moving to the side in the nip.

29. (Previously presented) The method as defined in claim 27, wherein the material properties of the flanks to be bonded one to the other are selected to be different so that, when the contacting flanks are heated, an alloy will form whose melting point is lower than the melting point of the strips to be connected in pairs at their flanks.

30. (Previously presented) The method as defined in claim 27, wherein at least one of the strips to be connected in pairs at their flanks has the respective flank coated with a solder.

31. (Previously presented) The method as defined in claim 30, wherein at least one of the two strips is coated with the solder only on the respective flank.

32. (Previously presented) The method as defined in claim 30, wherein the at least one strip is coated on its respective flank with a first metal, and the other strip is coated on its respective flank with a second metal and that as a result of the heating process these metals form the lower melting point alloy.

33. (Previously presented) The method as defined in claim 30, wherein the respective flank is coated using a galvanic process.

34. (Previously presented) The method as defined in claim 27, wherein the strips are pressed together by their flanks facing each other in the nip.

35. (Previously presented) The method as defined in claim 1, wherein the rolling process is carried out using a reduction per pass of 50%.

36. (Previously presented) The method as defined in claim 35, wherein the rolling process is carried out using a reduction per pass of 60% to 80%.

37. (Previously presented) The method as defined in claim 26, wherein the strips and/or the first or the second arrangement of strips are heated up after rolling to the temperature at which the flanks will be connected by a material bond.

38. (Previously presented) The method as defined in claim 37, wherein the first arrangement of strips is wound up continuously after rolling and is then heated.

39. (Previously presented) The method as defined in claim 37, wherein the strips and/or the first or the second arrangement of strips are heated immediately after rolling.

40. (Previously presented) The method as defined in claim 39, wherein the strips and/or the first or the second arrangement of strips are passed through a heating zone at the same speed at which they leave the nip.

41. (Previously presented) The method as defined in claim 27, wherein the strips in the first or the second arrangement of strips are heated up before the rolling operation to the temperature at which their flanks will form a material bond between them.

42. (Previously presented) The method as defined in claim 41, wherein the strips in the second arrangement of strips are heated immediately before rolling and are then rolled in hot condition.

43. (Previously presented) The method as defined in claim 41, wherein the first and the second arrangement of strips are guided already in the zone where they are heated so that their strips will not ~~more~~move to the side.

44. (Previously presented) Method in which one or more of the strips produced according to claim 1 are used once more in a method according to claim 1 for producing a more complex strip.

45. (Previously presented) The method as defined in claim 5, wherein the strip is equalized by an additional rolling operation after the roll-plating process.

46. (Previously presented) The method as defined in claim 45, wherein the strip is wound up only after the equalization process.

47. (Previously presented) The method as defined in claim 45, wherein the strip is equalized between two equalizing rolls arranged downstream of the working rolls.

48. (Previously presented) The method as defined in claim 17, wherein rolling is carried out as a hot-roll plating operation;
the strip is wound up only after the equalization process;
and the equalizing process is carried out after at least one of the additional strips has been removed from the rolled second arrangement of strips.

49. (Previously presented) The method as defined in claim 17, wherein rolling is carried out as a hot-roll plating operation;
the strip is wound up only after the equalization process;
and the equalizing process is carried out after all additional strips have been removed from the rolled second arrangement of strips.